



# VB-AIRSUSPENSION

making everyday smoother



*airsuspension*



- Increased comfort • Better driveability • More safety



## POSSIBLE VEHICLE MODIFICATIONS

PRODUCT SHEET

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## Full air-suspension

VB-FullAir is a fully automatic (adjustable) solution for suspension problems. The existing leaf- or coil-spring is replaced by a complete air-suspension system (including bellows, shock absorbers, compressor and an electronic control unit). The air-suspension system filters out road-surface imperfections and, therefore, improves the ride comfort. While driving, the vehicle will constantly remain at the ride height set by VB-Airsuspension (during installation). Both the road holding and the stability of the vehicle will be improved, which in turn will enhance safety. When the vehicle stands still, it is possible to raise and lower the step height / load platform to ease loading and unloading.

## Semi air-suspension

VB-SemiAir offers the possibility to, within limits, control any suspension problems oneself. On a vehicle with leaf springs, an air bellow is fitted between chassis and rear axle. This bellow supports the existing leaf spring the VB-SemiAir is supplied as a dual chamber system the bellows are not in connection with each other. Making use of a dual chamber system allows left and right to be separated, enabling the vehicle to be levelled, even when it is loaded unevenly. The VB-SemiAir has, therefore, two inflation valves. With this system, one can control the ride height, within limits, by varying the pressure in the bellows with the help of the inflation valve. This basic system is the starting-point for the adaptation and improvement of the suspension on your vehicle. Each basic system, VB-CoilAir and VB-SemiAir, contains all necessary parts, to allow fitment to the particular make and model. VB-Airsuspension supplies the majority of the kits with a brake regulator as standard. Most existing vehicles need this part for safe and reliable road behaviour and optimal braking performance.

## Auxiliary- or reinforced springs

Mounting reinforced coil or leaf springs is a non-adjustable solution for suspension problems. An additional spring leaf is mounted to the existing coil or leaf spring(s). Reinforced springs will usually ensure that the vehicle returns to its original ride height (if not higher), thus increasing the suspension travel and improving stability. This adjustment will however make the suspension more rigid (harder) and therefore reduces the ride comfort. This solution is often used for vehicles that are constantly heavily laden.

Dealer:

## Stabilisers

A stabiliser ensures that the vertical movements made by one wheel are (to a lesser degree) also made by the same wheel on the other side of the vehicle. This will lessen the amount of leaning in bends and reduces crosswind sensitivity. A (heavy duty) stabiliser is particularly recommended for vehicles with a high centre of gravity.

## Shock absorbers

Fitting heavy duty shock absorbers will ensure that the vehicle movements, in relation to the road surface, are absorbed more effectively. The vehicle will return to its correct driving position sooner after each movement. Vehicles with soft suspension are generally found to be comfortable but often demonstrate unstable road holding. By fitting heavy duty shock absorbers, the stability and also, therefore, the vehicle will improve.

Modification	Increasing ride height	Levelling off-centre loads	Reducing vehicle roll	Improving ride comfort	Improving vehicle handling
<b>VB-FullAir</b> Full air-suspension 	✓ 1	✓ 2	✓	✓	✓
<b>VB-SemiAir</b> Semi air-suspension 	✓	✓ 2	⚠ 5	⚠ 5	-
<b>VB-CoilSpring</b> Reinforced coil or leaf springs 	✓	-	✓ 4 & 5	⚠ 5	-
<b>VB-SpecialParts</b> Heavy duty stabilisers 	-	✓ 3	✓	-	✓
<b>VB-SpecialParts</b> Heavy duty shock absorbers 	-	-	⚠ 3, 5 & 6	✓ 6	✓



This product is best suited for this problem.



This product is less suitable for this problem.

1. Possibility to lower the rear of the vehicle.
2. Only with dual control (to a limited degree).
3. To a lesser degree.

4. At the expense of ride comfort.
5. Depends on the starting point.
6. Damps the oscillating movement.

The technical specifications are the standard VB-Airsuspension versions. Other specifications are on request.

VB-Airsuspension reserves the right to make changes without prior notification.

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